

CTA aMaze/Lariat

Updated 05/06/24

Reviewed 05/14/25

Indications - pre and post operative evaluation for atrial fibrillation.

Bill under CT Angio Cardiac w/ Contrast charge. Do not use CT Angio Coronary w/ Contrast charge.

GENERAL SCAN NOTES

Move the patient's arms over his/her head if possible. Remove any metal from the imaging field of view.

Topogram - lung apices through diaphragm (obtained during end inspiration).

Craniocaudal scan coverage - lung apices through the adrenal glands (**just have patient stop breathing**).

Adjust FOV (field of view) on topogram to smallest without cropping anatomy (target FOV 150-220 mm).

Craniocaudal scan coverage:

Pre contrast - lung apices through adrenal glands (**just have patient stop breathing**).

Angio phase - above pulmonary artery through adrenal glands (**just have patient stop breathing**).

Delay phase - just through left atrium (**just have patient stop breathing**).

EKG gating:

Pre contrast phase - **non gated**.

Cardiac phase - **prospective** preferred (30-60% RR interval) for the angio phase.

Can use retrospective for patients with high or irregular heart rates.

Delay phase - **prospective**.

IV Contrast:

Administer weight-based Omnipaque-350 - **1 mL/kg** up to **150 mL** (100 mL minimum).

Inject at **4 mL/sec** followed by 40 mL saline flush, 20-gauge or larger in AC fossa.

Cardiac phase - bolus track off **pulmonary artery** triggered at **100 HU**.

Delay phase - **30 secs** from start of injection.

SIEMENS PARAMETERS & RECONS

For the **Pre Contrast** phase:

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time	Scan Time
Go Top 64	spiral	120	62	on	on 80	1.20	64	0.6	0.33	1.1
Drive 128	spiral	120	66	on	on	1.20	128	0.6	0.5	1.6
Force 192	spiral	110	51	on	on	1.20	192	0.6	0.5	1.1

For the **Cardiac** phase:

Go Top 64	spiral	100	65	on	on 64	0.31	64	0.6	0.33	22.2
Drive 128	spiral	100	282	on	on	0.17	128	0.6	0.285	6.5
Force 192	spiral	100	288	on	on	0.15	192	0.6	0.25	4.3

For the **Delay** phase:

Go Top 64	spiral	100	65	on	on 64	0.31	64	0.6	0.33	22.2
Drive 128	spiral	100	282	on	on	3.40	128	0.6	0.285	0.3
Force 192	spiral	100	288	on	on	0.15	192	0.6	0.25	4.3

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PRE CONTRAST PHASE

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
AX SOFT PRE	3.0	3.0	Br40	mediastinum	2	head/feet
AX LUNG PRE	3.0	3.0	B159	lung	2	head/feet

CARDIAC PHASE

AX HEART 65%	3.0	3.0	Br40	cardiac	3	head/feet
COR HEART 65%	3.0	3.0	Bv36	cardiac	3	front/back
SAG HEART 65%	3.0	3.0	Bv36	cardiac	3	left/right
AX HEART THINS	1.0	1.0	Br40	cardiac	2	head/feet

DELAY PHASE

AX DELAY THINS	0.75	0.6	Br40	cardiac	3	head/feet
AX DELAY	3.0	3.0	Br40	mediastinum	3	head/feet